

OK Tigrod 12.64

A copper coated, G4Si1/ER70S-6 rod for GTAW of general structural and engineering unalloyed and low-alloyed carbon-manganese steels. Compared with OK Tigrod 12.61, OK Tigrod 12.64 has a slightly higher silicon and manganese content, which increases the weld metal strength. The high silicon content promotes low sensitivity to surface impurities and contributes to smooth, sound welds.

Specifications

Classifications	EN ISO 636-A : W 46 5 4Si1 EN ISO 636-A : W 4Si1 SFA/AWS A5.18 : ER70S-6
Approvals	ABS : 3Y (I1) BV : 3YM CE : EN 13479 DNV-GL : III YM (I1) LR : 3Y H15 (I1) UKCA : EN 13479 VdTÜV : 05260

Approvals are based on factory location. Please contact ESAB for more information.

Alloy Type	Carbon-manganese steel
Shielding Gas	I1 (EN ISO 14175)

Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
Ar (I1) AWS			
As Welded	510 MPa	610 MPa	30 %
Stress Relieved 2 hour(s) 620 °C	400 MPa	525 MPa	32 %
Ar (I1) EN			
As Welded	525 MPa	595 MPa	26 %

Charpy Testing

Testing Condition	Testing Temp	Impact Value
Ar (I1) AWS		
As Welded	-46 °C	100 J
Stress Relieved	-46 °C	80 J
Ar (I1) EN		
As Welded	-50 °C	90 J
As Welded	-40 °C	150 J

Typical Wire Composition %

C	Mn	Si
0.074	1.68	0.95

Typical Weld Metal Analysis %

C	Mn	Si	S	P
0.08	1.28	0.80	0.013	0.015